

WHAT IS CLAIMED IS:

1. An apparatus for holding an organ or tissue for at least one of perfusion, storage, diagnosis and transport of the organ, comprising:

a portable housing, the portable housing defining one or more openings; and

a tube frame removably connectible to the portable housing and configured to hold a plurality of tubes, wherein the tube frame is configured to hold the plurality of tubes in a position to be connected to a plurality of tubes in the portable housing through at least one of the one or more openings.

2. The apparatus of claim 1, wherein at least some of the plurality of tubes connectible to the tube frame are in fluid communication with the plurality of tubes in the portable housing.

3. The apparatus of claim 2, wherein the tubes in fluid communication allow a medical fluid to travel at least one of into and out of the portable housing.

4. The apparatus of claim 1, further comprising an organ or tissue supporting surface configured to support the organ or tissue within said portable housing while allowing effluent medical fluid to pass through said organ or tissue and form an organ bath.

5. The apparatus of claim 4, wherein at least one tube of the plurality of tubes in the portable housing has a first end in fluid communication with organ bath and a second end connectible with at least one of the plurality of tubes connectible to the tube frame.

6. The apparatus of claim 1, further comprising a filter, wherein one of the plurality of tubes in the portable housing has a first end connectible to the filter and a second end connectible to one of the plurality of tubes connectible to the tube frame.

7. The apparatus of claim 1, wherein at least one of the plurality of tubes connectible to the tube frame includes a sample port.

8. The apparatus of claim 1, further comprising a pressure sensor connectible to the tube frame, wherein the pressure sensor determines a pressure of a fluid in at least one of the plurality of tubes connectible to the tube frame.

9. The apparatus of claim 1, further comprising a bubble trap device connectible to the tube frame.

10. The apparatus of claim 9, wherein one or more of the plurality of tubes in the portable housing are connectible to one or more of the plurality of tubes connectible to the tube frame, wherein the one or more tubes connectible to the tube frame are connectible to at least one of an inlet and an outlet port of the bubble trap device.

11. The apparatus of claim 1, wherein one or more of the plurality of tubes in the portable housing are connectible to an organ or tissue.

12. The apparatus of claim 11, wherein the one or more tubes connectible to the organ are connectible to one or more tubes connectible to the tube frame.

13. The apparatus of claim 1, wherein at least part of the tube frame is connectible to a connection device of the portable housing.

14. The apparatus of claim 13, wherein the connection device is at least one of snaps, pins, clips and screws.

15. The apparatus of claim 1, wherein the one or more openings in the portable housing are configured to allow at least one of the plurality of tubes connectible to the tube frame and the plurality of tubes in the portable housing to pass through each of the at least one opening.

16. The apparatus of claim 1, further comprising at least one of an organ transporter, an organ perfusion device and an organ diagnostic device, wherein the portable housing is configured to be received by the at least one of the organ transporter, organ perfusion device and the organ diagnostic device.

17. The apparatus of claim 16, wherein at least part of the tube frame is connectible to a connection device of at least one of the organ transporter, organ perfusion device and the organ diagnostic device.

18. The apparatus of claim 17, further comprising a pump, wherein the pump controls fluid flow through the plurality of tubes.

19. The apparatus of claim 18, wherein the pump is connected to at least one of the organ transporter, the organ perfusion device and the organ diagnostic device.

20. The apparatus of claim 19, wherein the pump is a peristaltic pump.

21. The apparatus of claim 20, wherein at least a part of one of the plurality of tubes connectible to the tube frame is in contact with the peristaltic pump and connectible with one or more of the tubes connectible to the tube frame.

22. The apparatus of claim 17, wherein the connection device is at least one of snaps, pins, clips and screws.

23. The apparatus of claim 17, wherein each of the organ transporter, organ perfusion device and the organ diagnostic device include a sensor to detect at least one of a proper and improper connection between the tube frame and each of the at least one organ transporter, organ perfusion device and the organ diagnostic device.

24. The apparatus of claim 23, wherein the sensor is at least one of an electrical and mechanical sensor.

25. The apparatus of claim 24, wherein the sensor alerts a user of the at least one of a proper and improper connection by at least one of an audio and a visual signal.

26. The apparatus of claim 1, wherein the tube frame is made of plastic.

27. A method of at least one of perfusion, storage, and transport of an organ or tissue, comprising:

placing an organ or tissue in a portable housing, the portable housing defining one or more openings;

connecting a tube frame to the portable housing, wherein the tube frame is configured to hold a plurality of tubes and is removably connected to the portable housing, and wherein the tube frame holds the plurality of tubes in a position to be connected to a plurality of tubes in the portable housing through at least one of the one or more openings.

28. The method of claim 27, wherein at least some of the plurality of tubes connectible to the tube frame are in fluid communication with the plurality of tubes in the portable housing.

29. The method of claim 2, wherein the tubes in fluid communication allow a medical fluid to travel at least one of into and out of the portable housing.

30. The method of claim 27, further comprising supporting an organ or tissue on an organ or tissue supporting surface within said portable housing

31. The method of claim 30, further comprising passing effluent medical fluid through said organ or tissue

32. The method of claim 31, further comprising forming an organ bath with said medical fluid.

33. The method of claim 32, further comprising placing a first end of at least one tube of the plurality of tubes in the portable housing in fluid communication with the organ bath; and

connecting a second end with at least one of the plurality of tubes connectible to the tube frame.

34. The method of claim 27, further comprising connecting a first end of one of the plurality of tubes in the portable housing to a filter; and

connecting a second end to one of the plurality of tubes connectible to the tube frame.

35. The method of claim 27, wherein at least one of the plurality of tubes connectible to the tube frame tube includes a sample port.

36. The method of claim 1, further comprising connecting a bubble trap device to the tube frame.

37. The method of claim 36, further comprising connecting one or more of the plurality of tubes in the portable housing to one or more of the plurality of tubes connectible to the tube frame and connecting the one or more tubes connectible to the tube frame to at least one of an inlet and an outlet port of the bubble trap device.

38. The method of claim 27, connecting one or more of the plurality of tubes in the portable housing to an organ or tissue.

39. The method of claim 38, further comprising connecting the one or more tubes connected to the organ to one or more tubes connected to the tube frame.

40. The method of claim 27, further comprising connecting at least part of the tube frame to a connection device of the portable housing.

41. The method of claim 27, wherein the portable housing to be received by at least one of the organ transporter, organ perfusion device and the organ diagnostic device.

42. The method of claim 16, further comprising connecting at least part of the tube frame to a connection device of at least one of the organ transporter, organ perfusion device and the organ diagnostic device.

43. The method of claim 42, further comprising controlling fluid flow through the plurality of tubes with a pump.

44. The method of claim 43, further comprising connecting the pump to at least one of the organ transporter, the organ perfusion device and the organ diagnostic device.

45. The method of claim 41, further comprising detecting at least one of a proper and improper connection between the tube frame and each of the at least one organ transporter, organ perfusion device and the organ diagnostic device.

46. The method of claim 45, further comprising alerting a user of the at least one of a proper and improper connection by at least one of an audio and a visual signal.

47. An apparatus for holding an organ or tissue for at least one of perfusion, storage, diagnosis and transport of the organ, comprising:

a tube frame configured to hold a plurality of tubes, wherein the tube frame is configured to hold the plurality of tubes in a position to be connectible to a plurality of tubes of a portable housing through at least one of the one or more openings, wherein the tubes are held by the tube frame on substantially the same plane.